

resonance frequency, the controller being configured to send a signal configured to vary the at least one moment and variable resonance frequency.

**12.** An apparatus, comprising:

a haptic device configured to provide a plurality of haptic feedback responses, each haptic feedback response being uniquely associated with an operational mode of the haptic device; and

means for combining the haptic feedback responses based on at least one pre-determined parameter to produce a multi-mode haptic feedback response.

**13.** The apparatus of claim 12, wherein the haptic device is configured to provide a low-frequency response and a high-frequency response.

**14.** The apparatus of claim 12, wherein the haptic device is configured to provide a low-frequency response and a high-frequency response, the means for combining being configured to provide a transitional response between the low-frequency response and the high-frequency response.

**15.** The apparatus of claim 12, further comprising:

means for controlling the haptic device, the means for controlling the haptic device being configured to control the response of the haptic device within a plurality of operational modes.

**16.** The apparatus of claim 12, further comprising:

means for controlling the haptic device, the haptic device having a variable moment, the means for controlling being configured to vary the moment of the haptic device.

**17.** The apparatus of claim 12, further comprising:

means for controlling the haptic device, the haptic device having a variable moment, the means for controlling being configured to vary the moment of the haptic device by varying a velocity of the haptic device.

**18.** The apparatus of claim 12, further comprising:

means for controlling the haptic device, the haptic device having a variable moment, the means for controlling being configured to vary the moment of the haptic device by varying a direction of the haptic device.

**19.** A processor-readable medium comprising code representing instructions to cause a processor to:

send a first control signal to at least one haptic device collectively having a plurality of operational modes including a first operational mode and a second operational mode, the first control signal being associated with the first operational mode and a frequency range; and

send a second control signal to the at least one haptic device, the second control signal being associated with the second operational mode and a frequency range, the frequency range of the second control signal being different from the frequency range of the first operational mode, the second control signal being different from the first control signal.

**20.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

combine the first operational mode and the second operational mode by varying a duty cycle of at least one of the first control signal and the second control signal.

**21.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

combine the first operational mode and the second operational mode by augmenting at least a portion of one of the first control signal and the second control signal.

**22.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

combine the first operational mode and the second operational mode by a feedback algorithm based upon at least a portion of one of the first control signal and the second control signal.

**23.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

change the moment of the at least one haptic device.

**24.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

change the moment of the at least one haptic device by varying a velocity of the at least one haptic device.

**25.** The processor-readable medium of claim 19, further comprising code representing instructions to cause a processor to:

change the moment of the at least one haptic device by varying the direction of movement of the at least one haptic device.

**26.** A method, comprising:

producing a first frequency response using a haptic device, the first frequency response being associated with a first frequency range;

producing a second frequency response using the haptic device, the second frequency response being associated with a second frequency range that is separated from the first frequency range by a transition frequency range; and

adjusting a response of the haptic device based on at least one pre-determined parameter to produce a transitional response in the transition frequency range.

**27.** The method of claim 26, wherein the adjusting includes:

combining the first frequency response and the second frequency response of the haptic device.

**28.** The method of claim 26, wherein the adjusting includes:

summing the first frequency response and the second frequency response of the haptic device.

**29.** The method of claim 26, wherein the adjusting includes:

multiplying the first frequency response and the second frequency response of the haptic device.

**30.** The method of claim 26, wherein the adjusting includes:

performing a scalar adjustment of at least one of the first frequency response and the second frequency response.

**31.** The method of claim 26, wherein the adjusting includes: